

This listing of claims will replace all prior versions and listings of claims in the application:

**Listing of Claims:**

Claim 1 (currently amended): A polyaxial pedicle screw assembly for use in a spinal fixation system, the assembly comprising:

a pedicle screw having a head portion and a threaded shaft portion extending therefrom;

a body having an aperture adapted for receiving the threaded portion of the screw therethrough while retaining at least a portion of the head portion in a base of the body, a rod passageway, and oppositely threaded internal and external threads;

a set screw having exterior threads for engaging the internal threads of the body;  
and

a nut having internal threads for engaging the external threads of the body;

wherein the head portion of the pedicle screw includes a rounded head, and wherein the head and base form a spherical joint such that the body and head pivot with respect to one another.

Claim 2 (canceled)

Claim 3 (currently amended): The assembly of claim 1, including a compression washer disposed in the base for retaining the head of the pedicle screw within the base, the compression washer defining a concave facet on a lower surface thereof facing the rounded head of the pedicle screw and a generally planar surface on a generally opposite upper surface thereof facing a rod of the assembly.

Claim 4 (canceled)

Claim 5 (original): The assembly of claim 1, wherein the threaded portion of the pedicle screw is tapered.

Claim 6 (original): The assembly of claim 5, wherein a major diameter of the threaded portion is generally constant, and wherein a minor diameter of the threaded portion is tapered.

Claim 7 (original): The assembly of claim 1, wherein the pedicle screw includes a drive slot formed in the head portion thereof.

Claim 8 (original): The assembly of claim 1, wherein the rod passageway and the pedicle screw aperture of the body are generally transverse to one another.

Claim 9 (original): The assembly of claim 1, including a rod extending through the rod passageway.

Claim 10 (original): The assembly of claim 9, wherein the set screw is adapted to travel within the body and contact the rod, securing it in place within the body.

Claim 11 (original): The assembly of claim 1, wherein the set screw includes a drive slot therein for tightening by a driver device.

Claim 12 (original): The assembly of claim 1, wherein the nut has a polygonal outer configuration for tightening by a socket device.

Claim 13 (currently amended): A polyaxial pedicle screw assembly for use in a spinal fixation system, the assembly comprising:

- a pedicle screw including a head portion having a rounded head and a drive slot therein and a threaded shaft portion extending therefrom;

- a body having an aperture adapted for receiving the threaded portion of the screw therethrough while retaining the rounded head in a base of the body, a rod passageway generally transverse to the pedicle screw aperture, and oppositely threaded internal and external threads;

- a rod extending through the rod passageway;

a compression washer disposed in the base for retaining the head of the pedicle screw within the base, the compression washer defining a concave facet on a lower surface thereof facing the rounded head of the pedicle screw and a generally planar surface on a generally opposite upper surface thereof facing the rod;

a set screw having exterior threads for engaging the internal threads of the body and having a drive slot for selectively being moved into contact with the rod to secure the rod within the body;

a nut having internal threads for engaging the external threads of the body;  
wherein the round head of the screw and the base form a spherical joint  
permitting pivoting therebetween; and

wherein the set screw and nut are fastened in opposite directions to counteract fastening forces applied to the assembly.

Claims 14-15 (canceled)

Claim 16 (original): The assembly of claim 13, wherein the threaded portion of the pedicle screw is tapered.

Claim 17 (original): The assembly of claim 16, wherein a major diameter of the threaded portion is generally constant, and wherein a minor diameter of the threaded portion is tapered.

Claim 18 (currently amended): A spinal fixation system, comprising:

a plurality of pedicle screw assemblies; and  
a rod extending between the pedicle screw assemblies;  
wherein each pedicle screw assembly comprises:  
a pedicle screw including a head portion having a rounded head and a threaded shaft portion extending therefrom;  
a body having an aperture adapted for receiving the threaded portion of the screw therethrough while retaining the rounded head in a base of the body to permit the

screw and body to pivot with respect to one another, a rod passageway adapted for insertion of the rod therethrough, and oppositely threaded internal and external threads;

a set screw having exterior threads for engaging the internal threads of the body and having a drive slot for being selectively inserted into the body and in contact with the rod to secure the rod in place within the body; and

a nut having internal threads for engaging the external threads of the body; and a tightening device for simultaneously tightening the set screw and the nut, the tightening device comprises a wrench having a handle, a shaft and a socket adapted to engage the nut, and a driver having a handle, a shaft slidably extending through the shaft of the wrench and a driver end for engaging the driver slot of the set screw.

Claim 19 (original): The system of claim 18, including a compression washer disposed in the base above the screw for retaining the head of the screw within the base.

Claim 20 (original): The system of claim 18, wherein a major diameter of the threaded portion is generally constant, and wherein a minor diameter of the threaded portion is tapered.

Claim 21 (original): The system of claim 18, wherein the pedicle screw includes a drive slot formed in the head portion thereof.

Claims 22 -23 (canceled)

Claim 24 (new): The assembly of claim 1, wherein the spherical joint is configured to permit up to fifteen degrees of rotation from a central axis between the assembled body and the head of the pedicle screw.

Claim 25 (new): The assembly of claim 6, wherein a shank portion of the pedicle screw between the head and threaded portions is approximately the diameter of the constant major diameter.

Claim 26 (new): The assembly of claim 13, wherein the spherical joint is configured to permit up to fifteen degrees of rotation from a central axis between the assembled body and the head of the pedicle screw.

Claim 27 (new): The assembly of claim 17, wherein a shank portion of the pedicle screw between the head and threaded portions is approximately the diameter of the constant major diameter.